



Clean Version of Pending Claims

FOLDED FIN HEAT SINKS

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1. (Four Times Amended) A heat sink, comprising:
a plurality of laterally placed planar fins forming from a sheet, the plurality of laterally placed planar fins defining a folded fin structure having a top, a bottom, and a front, and wherein the top of at least one fin of the folded fin structure comprises an arch, wherein the top of the at least one fin includes a trimmed opening that extends along a portion of the length of the top of the at least one fin, wherein the trimmed opening is formed by removing the arch along the portion of the length of the top of the at least one fin;
a base attached to the bottom of the folded fin structure; and
a clip that attaches and thermally couples the folded fin structure to the base.
2. The heat sink of claim 1, further comprising a first fan attached to the top of the folded fin structure to introduce a convection medium.
3. The heat sink of claim 2, further comprising a second fan attached to the front of the folded fin structure to introduce a convection medium.
5. The heat sink of claim 1, wherein the sheet is made from a material selected from a group consisting of copper, aluminum, a compound containing copper, a compound containing aluminum, or thermally conductive plastic.
6. The heat sink of claim 1, wherein the folded fin structure allows greater than fifty percent of the plurality of laterally placed planar fins to be receptive to the convection medium.

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7. The heat sink of claim 1, wherein the convection medium is guided by the folded fin structure to flow parallel to each surface of each fin of the plurality of laterally placed planar fins and parallel to the base.
8. The heat sink of claim 1, wherein the base is solid.
9. The heat sink of claim 8, wherein the base is made from a material selected from a group consisting of copper, aluminum, a compound containing copper, a compound containing aluminum, or manufactured diamond.
22. (Three Times Amended) A heat sink, comprising:
 - a thermally conductive sheet creased in an accordion fold to form a plurality of surfaces defining a fin bundle having a top and a bottom, wherein the top of the fin bundle is modified to create a plurality of trimmed openings that extend along a portion of the length of the top of the fin bundle, wherein the top of the fin bundle comprises a plurality of arches, wherein the trimmed openings are formed by removing the plurality of arches along the portion of the length of the top, and wherein more than fifty percent of the plurality of surfaces are receptive to an introduced convection medium;
 - a fan for introducing the convection medium, the fan attached to the top of the fin bundle;
 - a base attached to the bottom of the fin bundle; and
 - a clip that attaches and thermally couples the base to the bottom of the fin bundle.
23. The apparatus of claim 22, wherein the sheet is made from an alloy containing aluminum.
24. The apparatus of claim 22, wherein the base is made out of manufactured diamond.